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APPLICATION NO.	I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,277	04/30/2001		Gordon W. Roberts	10075-00003	9977
21918	7590	06/18/2004		EXAMINER	
		N MARTIN PLLC	WAMSLEY, PATRICK G		
199 MAIN STREET P O BOX 190				ART UNIT	PAPER NUMBER
BURLINGT	BURLINGTON, VT 05402-0190			2819	
				DATE MAILED: 06/18/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/844,277	ROBERTS ET AL.				
Office Action Summary	Examin r	Art Unit				
anners.	Patrick G Wamsley	2819				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 1-29 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) 1-29 are subject to restriction and/or expressions.	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the bedrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on Noed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary Paper No(s)/Mail Da					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>		atent Application (PTO-152)				

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#### **DETAILED ACTION**

### Election of Species

This application contains claims directed to the following patentably distinct species of the claimed invention:

A first species, depicted in Figure 1, readable upon claims 6-10, 14, 21, and 26.

A second species, depicted in Figure 3, readable upon claims 17 and 29.

A third species, depicted in Figure 4, readable upon claims 13 and 23.

A fourth species, depicted in Figure 5, readable upon claims 12 and 25.

A fifth species, not depicted in any figure, readable upon claims 11 and 22.

A sixth species, depicted in Figure 13, readable upon claims 15-16 and 27-28.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, at least claim 1 appears generic. The examiner regards the PDM and PWM species as obvious variants of each other. The sigma delta modulator, depicted in Figure 8, is deemed to be an obvious variant of Figure 1.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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## **Drawings**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the linear feedback shift register [LFSR] must be shown or canceled from claims 11 and 22. No new matter should be entered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick G. Wamsley whose telephone number is (571) 272-1814. Send facsimiles to (703) 872-9306

Patrick G. Wandley June 16, 2004